

**AMENDMENTS TO THE SPECIFICATION**

Please amend the specification as indicated below. The paragraph numbers are with respect to the paragraph numbers in the pre-grant publication of the present application, a copy of which is attached.

After paragraph [0014], revise the heading as follows:

~~DESCRIPTION OF THE INVENTION~~ Summary

Prior to paragraph [0019], revise the heading as follows:

~~Preferred Embodiment~~ Brief Description of the Drawings

Please replace paragraph [0020] with the following amended paragraph:

[0020] FIGS. 1 to 3C show an example of the fabrication of a search coil of the present measuring tool using thick-film technology;

Please replace paragraph [0021] with the following amended paragraph:

[0021] ~~FIG. 4 shows~~ FIGS. 4A and 4B show a second example of the coil layout of a search coil together with the coil for measuring the magnetic field strength of the present measuring tool as well as a close up of the search coil conducting tracks;

Please replace paragraph [0024] with the following amended paragraph:

[0024] ~~FIG. 7 shows a foto~~ FIGS. 7A and 7B show a schematic of an embodiment of the two pole pieces used in the present measuring tool; and

After paragraph [0025], insert the following heading:

Detailed Description

Please replace paragraph [0032] with the following amended paragraph:

[0032] The coil layer is fabricated with a thick-film coating of silver-palladium (3:1) and consists of an inwardly-turning spiral with an outside diameter of 25 mm and an internal diameter of 13 mm. ~~FIG. 2A shows on the left hand side the plain substrate 10, on the right hand side~~ and FIG. 2b shows the substrate 10 with the first coil layer 6a.

Please replace paragraph [0035] with the following amended paragraph:

[0035] ~~FIG. 3 shows on the left hand side~~ FIG. 3A shows the first insulating layer 9, ~~in the centre~~ FIG. 3B shows the second coil layer 6b and ~~on the right hand side~~ FIG. 3C shows the top insulating layer 16.

Please replace paragraph [0036] with the following amended paragraph:

EXAMPLE 2

[0036] In a second embodiment the reverse J-compensating coil 6 and the field-measuring coil 7 are elaborated in the same way as in Example 1, but with a different construction. Of the whole new coils have a circular H coil 7 and redesigned J coils 6a, 6b with fewer turns and larger spacing between the individual turns. The layout out the coils was also slightly altered to reduce the risks of short-circuiting. The design of the new J-coil 6 and a close up of the conducting tracks can be seen in ~~FIG. 4~~ FIGS. 4A and 4B. ~~The right hand side of FIG. 4~~ FIG. 4B shows a close up of the J-coil 6 conducting tracks.

Please replace paragraph [0040] with the following amended paragraph:

[0040] Both the base piece 11 and the pole piece body 12 are round and machined from pure iron. The insulating piece 13 is 100.times.200 mm and 6-mm thick. The material is mica based, it has a density of about 2.2 kg/dm.sup.3 and a thermal conductivity of 0.26 W/mK. The heaters 8 are made from NiCr 8020 wire with pure magnesium oxide. Each heater 8 is 12.5 mm in diameter and 60-mm long (FIG. 7A and 7B).